

What is claimed is:

1. A method for providing privacy management for a wireless communication device, the method comprising the steps of:

5 establishing rules of communication between the wireless communication device and a remote source; and

managing communications between the wireless communication device and the remote source so that at least one of the following acts occurs responsive to the step of establishing the rules of communication: (a) allowing the remote source to know one but not both of an identity

10 and a location of the wireless communication device and (b) prohibiting the location of the wireless communication device from being known to the remote source.

2. A method according to claim 1 wherein the step of managing further comprises:

receiving a request for location information associated with the wireless communication  
15 device from the remote source;

determining whether or not the wireless communication device approves of the remote source responsive to the step of receiving the request;

sending the location information to the remote source responsive to determining that the wireless communication device approves of the remote source; and

20 rejecting the request from the remote source responsive to determining that the wireless communication device does not approve of the remote source.

3. A method according to claim 2 wherein the remote source is a location privacy manager, wherein the wireless communication device approves of the location privacy manager when the  
25 wireless communication device is registered to operate with the location privacy manager, and

wherein the wireless communication device does not approve of the location privacy manager when the wireless communication device is not registered to operate with the location privacy manager.

- 5     4.     A method according to claim 2 wherein the remote source is a location-enabled service, wherein the wireless communication device approves of the location-enabled service when the wireless communication device accepts an identity of the location-enabled service, and wherein the wireless communication device does not approve of the location-enabled service when the wireless communication device does not accept the identity of the location-enabled service.

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5.     A method according to claim 2 wherein each of the steps in claim 2 are performed by a wireless communication device.

6.     A method according to claim 1 wherein the step of managing further comprises:
- 15     receiving a request for location information associated with the wireless communication device from the remote source;
- determining whether or not the wireless communication device approves of the remote source responsive to the step of receiving the request;
- sending a request for the location information to the wireless communication device
- 20     responsive to the step of determining that the wireless communication device approves of the remote source;
- receiving the location information from the wireless communication device responsive to the step of sending the request;
- sending the location information to the remote source responsive to the step of receiving
- 25     the location information; and

rejecting the request from the remote source responsive to the step of determining that the wireless communication device does not approve of the remote source.

7. A method according to claim 6 wherein the remote source is a location privacy manager,  
5 wherein the wireless communication device approves of the location privacy manager when the wireless communication device is registered to operate with the location privacy manager, and wherein the wireless communication device does not approve of the location privacy manager when the wireless communication device is not registered to operate with the location privacy manager.

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8. A method according to claim 6 wherein the remote source is a location-enabled service, wherein the wireless communication device approves of the location-enabled service when the wireless communication device accepts an identity of the location-enabled service, and wherein the wireless communication device does not approve of the location-enabled service when the  
15 wireless communication device does not accept the identity of the location-enabled service.

9. A method according to claim 6 wherein each of the steps in claim 7 are performed by at least one of a wireless communication network and a location privacy manager.

20 10. A method according to claim 1 wherein the steps of establishing and managing are performed by a wireless communication device.

11. A method according to claim 1 wherein the steps of establishing and managing are performed by a wireless communication network.

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12. A method according to claim 1 wherein the steps of establishing and managing are performed by a location privacy manager.

13. A method, performed by a wireless communication device, comprising the steps of:

5 receiving a request for location information associated with the wireless communication device from a remote source;

determining whether or not the wireless communication device approves of the remote source responsive to the step of receiving the request;

10 sending the location information to the remote source responsive to determining that the wireless communication device approves of the remote source; and

rejecting the request from the remote source responsive to determining that the wireless communication device does not approve of the remote source.

14. A method according to claim 13 wherein the remote source is a location privacy manager, wherein the wireless communication device approves of the location privacy manager when the wireless communication device is registered to operate with the location privacy manager, and wherein the wireless communication device does not approve of the location privacy manager when the wireless communication device is not registered to operate with the location privacy manager.

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15. A method according to claim 13 wherein the remote source is a location-enabled service, wherein the wireless communication device approves of the location-enabled service when the wireless communication device accepts an identity of the location-enabled service, and wherein the wireless communication device does not approve of the location-enabled service when the wireless communication device does not accept the identity of the location-enabled service.

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16. A method, performed by a wireless communication network, comprising the steps of:  
receiving a request for location information associated with the wireless communication device from a remote source;
- 5 determining whether or not the wireless communication device approves of the remote source responsive to the step of receiving the request;  
sending a request for the location information to the wireless communication device responsive to the step of determining that the wireless communication device approves of the remote source;
- 10 receiving the location information from the wireless communication device responsive to the step of sending the request;  
sending the location information to the remote source responsive to the step of receiving the location information; and  
rejecting the request from the remote source responsive to the step of determining that  
15 the wireless communication device does not approve of the remote source.
17. A method according to claim 16 wherein the remote source is a location privacy manager, wherein the wireless communication device approves of the location privacy manager when the wireless communication device is registered to operate with the location privacy  
20 manager, and wherein the wireless communication device does not approve of the location privacy manager when the wireless communication device is not registered to operate with the location privacy manager.
18. A method according to claim 16 wherein the remote source is a location-enabled service,  
25 wherein the wireless communication device approves of the location-enabled service when the

wireless communication device accepts an identity of the location-enabled service, and wherein the wireless communication device does not approve of the location-enabled service when the wireless communication device does not accept the identity of the location-enabled service.

19. A method, performed by a location privacy manager, comprising the steps of:

5 establishing rules of communication between a wireless communication device and a location-enabled service; and

managing communications between a wireless communication device and a location-enabled service so that at least one of the following acts occurs responsive to the step of establishing the rules of communication: (a) allowing the location-enabled service to know one  
10 but not both of an identity and a location of the wireless communication device and (b) prohibiting the location of the wireless communication device from being known to the location-enabled service.

20. A wireless communication device comprising:

15 an antenna for communicating radio frequency signals over a radio frequency communication channel between the wireless communication device and a remote source;

a receiver, coupled to the antenna, for receiving the radio frequency signals from the remote source;

20 a transmitter, coupled to the antenna, for transmitting the radio frequency signals to the remote source;

a memory device, coupled to the controller, for storing rules of communication between the wireless communication device and remote source, and for storing an identity and a location of the wireless communication device;

25 a controller, coupled to the receiver and the transmitter, for managing communications between the wireless communication device and the remote source so that at least one of the

following acts occurs responsive to the rules of communication: (a) allowing the remote source to know one but not both of the identity and the location of the wireless communication device and (b) prohibiting the location of the wireless communication device from being known to the remote source;

5           a user interface, coupled to the controller, for communicating user interface signals between a user of the wireless communication device and the controller.

21.    A wireless communication network comprising:

          an antenna for communicating radio frequency signals over a radio frequency  
10   communication channel between the wireless communication network and a wireless communication device;

          a receiver, coupled to the antenna, for receiving the radio frequency signals from the wireless communication device;

          a transmitter, coupled to the antenna, for transmitting the radio frequency signals to the  
15   wireless communication device;

          a communication switch, coupled to the transmitter and the receiver, for routing information communicated over radio frequency communication channel;

          a memory device for storing rules of communication between the wireless communication device and a remote source;

20           a location privacy manager interface, coupled to the remote source, for communicating signals between the wireless communication network and the remote source; and

          a controller, coupled to the communication switch, the memory device and the location privacy manager interface, for managing communications between the wireless communication device and the remote source so that at least one of the following acts occurs responsive to the  
25   rules of communication: (a) allowing the remote source to know one but not both of an identity

and a location of the wireless communication device and (b) prohibiting the location of the wireless communication device from being known to the remote source.

22. A location privacy manager comprising:

5 a wireless communication network interface for communicating signals between the location privacy manager and a wireless communication network;

a remote source interface for communicating signals between the location privacy manager and a remote source;

10 a memory device for storing rules of communication between a wireless communication device and a remote source; and

a controller, coupled to the wireless communication network interface, the remote source interface, and the memory device, for managing communications between the wireless communication device and the remote source so that at least one of the following acts occurs responsive to the rules of communication: (a) allowing the remote source to know one but not  
15 both of an identity and a location of a wireless communication device, communicating with the wireless communication network, and (b) prohibiting the location of the wireless communication device from being known to the remote source.

23. A method for providing privacy management for a wireless communication device, the  
20 method comprising the steps of:

establishing rules of communication between the wireless communication device and a remote source; and

managing communications between the wireless communication device and the remote source to prohibit at least one of an identity and a location of the wireless communication device



from being known to the remote source responsive to the step of establishing the rules of communication;

wherein the rules of communication further comprise:

5 a rule that the wireless communication device shall only communicate with the remote source having an acceptable identity, and

wherein the step of managing the communications further comprises the steps of:

receiving a request for location information associated with the wireless communication device from the remote source responsive to the remote source being pushed to the wireless communication device by the remote source;

10 determining whether or not an identity of the remote source is acceptable to the wireless communication device responsive to the step of determining that the request is received from the remote source;

15 sending a request for the location information to the wireless communication device responsive to determining that the identity of the remote source is acceptable to the wireless communication device;

receiving the location information from the wireless communication device responsive to the step of sending the request;

sending the location information to the remote source responsive to the step of receiving the location information; and

20 rejecting the request from the remote source responsive to determining that the identity of the remote source is not acceptable to the wireless communication device.

24. A method according to claim 23 wherein each of the steps in claim 34 are performed by at least one of a wireless communication network and a location privacy manager.

25. A method, performed by a location privacy manager, comprising the steps of:  
establishing rules of communication between a wireless communication device and a location-enabled service; and

managing communications between a wireless communication device and a location-enabled service to prohibit at least one of an identity and a location of the wireless communication device from being known to the location-enabled service responsive to the step of establishing the rules of communication;

wherein the rules of communication further comprise:

a rule that the wireless communication device shall only communicate with the location-enabled service having an acceptable identity, and

wherein the step of managing the communications further comprises the steps of:

receiving a request for location information associated with the wireless communication device from the location-enabled service responsive to the location-enabled service being pushed to the wireless communication device by the location-enabled service;

determining whether or not an identity of the location-enabled service is acceptable to the wireless communication device responsive to the step of determining that the request is received from the location-enabled service;

sending a request for the location information to the wireless communication device responsive to determining that the identity of the location-enabled service is acceptable to the wireless communication device;

receiving the location information from the wireless communication device responsive to the step of sending the request;

sending the location information to the location-enabled service responsive to the step of receiving the location information; and

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rejecting the request from the location-enabled service responsive to determining that the identity of the location-enabled service is not acceptable to the wireless communication device.